

ABSTRACT

Histological and Sperm Quality of Rats in Subchronic Toxicity of Fractionated 70% Ethanolic Extract *Justicia gendarussa* Burm.f.

Sofyan Kurniawan

The ethanolic extract of *Justicia gendarussa* Burm. f. have been used by Irian Jaya's people as man contraception drugs. The preclinical trial showed that 60% ethanolic extract of *Justicia gendarussa* Burm. f. effective inhibits mice fertilization and have no danger toxicity. Clinical trial phase 1 evaluated safety of 70 % ethanolic extract of *Justicia gendarussa* Burm. f, there is no effect on subject healthy. Clinical trial phase 2 evaluated efficacy of 70 % ethanolic extract of *Justicia gendarussa* Burm.f, showed that 70 % ethanolic extract of *Justicia gendarussa* Burm is effective inhibits fertilization. This subchronic toxicity study evaluated is there any effect of fractionated 70 % ethanolic extract of *Justicia gendarussa* Burm. f in histological testes and sperm quality.

A total of 40 wistar rats divided in 4 groups. The control group was given CMC-Na 0,5 %. The group I was given 40 mg/Kg BW 70 % ethanolic extract of *Justicia gendarussa* Burm.f. The group II was given 200 mg/Kg BW 70 % ethanolic extract of *Justicia gendarussa* Burm.f. The group III was given 1000 mg/Kg BW 70 % ethanolic extract of *Justicia gendarussa* Burm.f. After 90 days all rats was killed sperm from cauda epididimis was collected and testes was evaluated. In this study showed that fractionated 70 % ethanolic extract of *Justicia gendarussa* Burm.f can decrease motility, viability and concentration spermatozoa. Fractionated 70 % ethanolic extract of *Justicia gendarussa* Burm.f can decrease seminiferous tubule diameter's, increase seminiferous tubule thickness and decrease total spermatogenic cell, but no effect on Leydig cell.

Key word ; *Justicia gendarussa*, 70% ethanolic extract, subchronic toxicity, sperm, testis